UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

## NOTICE OF ALLOWANCE AND FEE(S) DUE

22429

7590

10/31/2008

LOWE HAUPTMAN HAM & BERNER, LLP 1700 DIAGONAL ROAD SUITE 300 ALEXANDRIA, VA 22314 EXAMINER

DUNWIDDIE, MEGHAN K

ART UNIT PAPER NUMBER

2875

DATE MAILED: 10/31/2008

| ĺ | APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-----------------|-------------|----------------------|---------------------|------------------|
| • | 10/562,263      | 12/28/2005  | Young-shig Shim      | 122996-05167030     | 3413             |

TITLE OF INVENTION: PRISM SHEET OF BACK LIGHT UNIT FOR LCD

| APPLN. TYPE    | SMALL ENTITY | ISSUE FEE DUE | PUBLICATION FEE DUE | PREV. PAID ISSUE FEE | TOTAL FEE(S) DUE | DATE DUE   |
|----------------|--------------|---------------|---------------------|----------------------|------------------|------------|
| nonprovisional | YES          | \$755         | \$300               | \$0                  | \$1055           | 02/02/2009 |

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

#### PART B - FEE(S) TRANSMITTAL

### Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

Commissioner for Patents P.O. Box 1450

Alexandria, Virginia 22313-1450 (571)-273-2885 or <u>Fax</u>

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission. CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address) 22429 7590 10/31/2008 Certificate of Mailing or Transmission LOWE HAUPTMAN HAM & BERNER, LLP I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below. 1700 DIAGONAL ROAD SUITE 300 ALEXANDRIA, VA 22314 (Depositor's name (Signature) (Date APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. 10/562.263 12/28/2005 Young-shig Shim 122996-05167030 3413 TITLE OF INVENTION: PRISM SHEET OF BACK LIGHT UNIT FOR LCD APPLN. TYPE SMALL ENTITY ISSUE FEE DUE PUBLICATION FEE DUE PREV. PAID ISSUE FEE TOTAL FEE(S) DUE DATE DUE nonprovisional YES \$755 \$300 \$0 \$1055 02/02/2009 **EXAMINER** ART UNIT CLASS-SUBCLASS DUNWIDDIE, MEGHAN K 2875 362-362000 1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363). 2. For printing on the patent front page, list (1) the names of up to 3 registered patent attorneys ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached. or agents OR, alternatively, (2) the name of a single firm (having as a member a Tree Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required. registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed. 3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type) PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment. (A) NAME OF ASSIGNEE (B) RESIDENCE: (CITY and STATE OR COUNTRY) 4a. The following fee(s) are submitted: 4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above) ☐ Issue Fee ☐ A check is enclosed. ☐ Publication Fee (No small entity discount permitted) Payment by credit card. Form PTO-2038 is attached. The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number \_\_\_\_\_\_ (enclose an extra copy of this fo ☐ Advance Order - # of Copies \_ (enclose an extra copy of this form). 5. Change in Entity Status (from status indicated above) ☐ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. ■ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2). NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office. Authorized Signature \_ Date Typed or printed name Registration No. This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.

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# UNITED STATES PATENT AND TRADEMARK OFFICE

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| 10/562,263 12/28/2005      |                | Young-shig Shim      | 122996-05167030                 | 3413             |
| 22429 75                   | 90 10/31/2008  |                      | EXAM                            | INER             |
| LOWE HAUPTN                | MAN HAM & BERN | DUNWIDDIE, MEGHAN K  |                                 |                  |
| 1700 DIAGONAL ROAD         |                |                      | ART UNIT                        | PAPER NUMBER     |
| SUITE 300<br>ALEXANDRIA, V | 'A 22314       |                      | 2875<br>DATE MAILED: 10/31/2008 |                  |

## Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 124 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 124 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

|  | Application No.  | Applicant(s)   |  |  |  |
|--|--|--|--|--|--|
|  | 10/562,263   | SHIM ET AL.  |  |  |  |
| Notice of Allowability   | Examiner   | Art Unit   |  |  |  |
|  | MEGHAN K. DUNWIDDIE  | 2875   |  |  |  |
|  | MEGHAN K. DUNWIDDIE  | 2013   |  |  |  |
| The MAILING DATE of this communication appeal All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIOF of the Office or upon petition by the applicant. See 37 CFR 1.313 | (OR REMAINS) CLOSED in this ap<br>or other appropriate communication<br>IGHTS. This application is subject | pplication. If not included on will be mailed in due course. <b>THIS</b> |  |  |  |
| 1. $\boxtimes$ This communication is responsive to <u>amendment received</u>   | on July 10, 2008.  |  |  |  |  |
| 2. The allowed claim(s) is/are 1-3,5-12 and 14-17.   |  |  |  |  |  |
| <ul> <li>3. ☐ Acknowledgment is made of a claim for foreign priority ur</li> <li>a) ☐ All b) ☐ Some* c) ☐ None of the:</li> <li>1. ☐ Certified copies of the priority documents have</li> <li>2. ☐ Certified copies of the priority documents have</li> </ul>                                  | be been received. be been received in Application No.  |  |  |  |  |
| 3. Copies of the certified copies of the priority do   | cuments have been received in this   | s national stage application from the                                    |  |  |  |
| International Bureau (PCT Rule 17.2(a)).   |  |  |  |  |  |
| * Certified copies not received:   |  |  |  |  |  |
| Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONM THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.  |  | y complying with the requirements  |  |  |  |
| 4. A SUBSTITUTE OATH OR DECLARATION must be subm<br>INFORMAL PATENT APPLICATION (PTO-152) which give   |  |  |  |  |  |
| . CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.   |  |  |  |  |  |
| (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached   |  |  |  |  |  |
| 1)  hereto or 2)  to Paper No./Mail Date   |  |  |  |  |  |
| (b) ☐ including changes required by the attached Examiner's<br>Paper No./Mail Date   | s Amendment / Comment or in the  | Office action of   |  |  |  |
| Identifying indicia such as the application number (see 37 CFR 1 each sheet. Replacement sheet(s) should be labeled as such in t   |  |  |  |  |  |
| 6. DEPOSIT OF and/or INFORMATION about the depo attached Examiner's comment regarding REQUIREMENT  |  |  |  |  |  |
|  |  |  |  |  |  |
| Attachment(s)  |  |  |  |  |  |
| <ol> <li>Notice of References Cited (PTO-892)</li> <li>Notice of Draftperson's Patent Drawing Review (PTO-948)</li> </ol>  | 5. Notice of Informal  | • •  |  |  |  |
|  | 6.  ☐ Interview Summar<br>Paper No./Mail Da  | ate  |  |  |  |
| 3. Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date  | 7. 🗌 Examiner's Amend  | dment/Comment  |  |  |  |
| 4.   Examiner's Comment Regarding Requirement for Deposit  | 8. 🛛 Examiner's Statem   | nent of Reasons for Allowance  |  |  |  |
| of Biological Material   | 9.   |  |  |  |  |
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|  |  |  |  |  |  |



Application No.

Application/Control Number: 10/562,263 Page 2

Art Unit: 2875

### **REASONS FOR ALLOWANCE**

1. The following is an examiner's statement of reasons for allowance: The prior art when taken separately or combined fails to teach and/or show a prism sheet of a backlight unit for an LCD as set forth in Claim 1 having a structural surface on one side and a flat surface on the other side. The structural surface having a linear arrangement of right-angled isosceles triangular prisms arranged in parallel and configured to form a plurality of peaks and valleys wherein the peaks have a height variation of 0.25-2.5 micrometers.

2. The prior art when taken separately or combined fails to teach and/or show a backlight unit as set forth in Claim 10 having two or more prism sheets of which prisms are crossed with each other by a predetermined angle, each of the prism sheets having a structural surface on a side thereof and a flat surface opposing the structural surface. The structural surface having a linear arrangement of right-angled isosceles triangular prisms arranged in parallel and configured to form a plurality of peaks and valleys with the peaks of the prism sheet having a height variation of 0.125-2.5 micrometers.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

## Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MEGHAN K. DUNWIDDIE whose telephone number is (571)272-8543. The examiner can normally be reached on Monday through Friday 8 am-4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sandra O'Shea can be reached on (571)272-2378. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Sandra L. O'Shea/ Supervisory Patent Examiner, Art Unit 2875

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**MKD**